

In the Claims:

Please cancel claims 1, 4 and 17 without prejudice or disclaimer.

Please amend claims 2, 3, 5-10, 12-14, 18, 19 and 28 to read as follows:

61
2. (Amended) The lithium secondary battery according to claim 6, wherein a center axis of said winding core overlaps a center axis of said battery case.

3. (Amended) The lithium secondary battery according to claim 6, wherein said external terminals are made to comprise a center hollow portion so that this center hollow portion functions as a pressure release path of said pressure release hole.

62
5. (Amended) The lithium secondary battery according to claim 6, wherein said winding core has thickness of not less than 0.8 mm.

6. (Amended) A lithium secondary battery comprising:

an internal electrode body formed by winding a positive electrode and a negative electrode on an outer peripheral wall of a hollow cylindrical winding core;

a cylindrical battery case containing the internal electrode body inside with both ends thereof being open;

nonaqueous electrolyte solution contained in said case and contacting said positive electrode and said negative electrode; and

electrode caps having battery caps, internal terminals, and external terminals which seal said internal electrode body at both open ends of the battery case,

wherein at least one of the electrode caps has a pressure release hole in a position corresponding with the center axis of the winding core,

wherein the capacity (C) of said internal electrode body is not less than 2 Ah, and said pressure release hole's sectional area (S_1) as well as said winding core's center hollow portion's sectional area (S_2) are larger than $0.3 \text{ (cm}^2\text{)}$,

and wherein the values given by dividing said pressure release hole's sectional area (S_1) and said winding core's center hollow portion's sectional area (S_2) by said internal electrode body's battery capacity (C) respectively (S_1/C and S_2/C) are both larger than $0.02 \text{ (cm}^2\text{/Ah)}$.

7. (Amended) The lithium secondary battery according to claim 6, wherein the size of said winding core's center hollow portion's sectional area (S_2) is not less than said pressure release hole's sectional area (S_1).

8. (Amended) The lithium secondary battery according to claim 6, wherein said winding core is made of aluminum or an aluminum alloy.

9. (Amended) A lithium secondary battery comprising:

an internal electrode formed by winding a positive electrode and a negative electrode on an outer peripheral wall of a hollow cylindrical winding core;

a cylindrical battery case containing the internal electrode body inside with both ends thereof being open;

nonaqueous electrolyte solution contained in said case and contacting said positive electrode and said negative electrode; and

electrode caps having battery caps, internal terminals, and external terminals, said battery caps sealing said internal electrode body at both open ends of the battery case, at least one of said battery caps having a pressure release hole in a position corresponding with a center axis of said winding core,

wherein a pressure release valve is disposed on an internal peripheral wall of said pressure release hole or at the end of said pressure release hole, said pressure release valve comprising an elastic body, a metal foil and a spacer, said elastic body and said metal foil being brought into pressure contact with said spacer to seal said battery case.

10. (Amended) The lithium secondary battery according to claim 9, wherein said metal foil is formed so as to have a surface pressure of not less than 980 kPa.

12. (Amended) The lithium secondary battery according to claim 9, wherein said spacer is a ring member or a ring member having stopper structure in order that stress of less than a constant amount will be applied to said elastic body.

13. (Amended) The lithium secondary battery according to claim 9, wherein said metal foil is

made of Al, Cu or Ni, said metal foil being coated by fluoride resin.

14. (Amended) The lithium secondary battery according to claim 9, wherein stress applied to said elastic body is not less than 980 kPa and not more than a force at which said elastic body maintains elasticity of not less than 95%.

18. (Amended) The lithium secondary battery according to claim 1, wherein said pressure release hole is used as the electrolyte solution inlet.

19. (Amended) A lithium secondary battery comprising:

an internal electrode formed by winding a positive electrode and a negative electrode on an outer peripheral wall of a hollow cylindrical winding core;

a cylindrical battery case containing the internal electrode body inside with both ends thereof being open;

nonqueous electrolyte solution contained in said case and contacting said positive electrode and said negative electrode; and

electrode caps which seal said internal electrode body at both open ends of the battery case,

said electrode caps being substantially rotationally symmetrical around the center axis of said battery case,

wherein at least one of the electrode caps has a pressure release hole, and said pressure release hole has a sectional area (S_1) which is larger than 0.3 cm^2 , and said winding core has a center hollow portion having a sectional area (S_2) which is larger than 0.3 cm^2 , and wherein the capacity (C) of said internal electrode body is not less than 2 Ah.

28. (Amended) A method of manufacturing a lithium secondary battery, which comprises:

preparing plate-like members functioning as caps after production, elastic bodies, metal foils and spacers which are processed in advance to a predetermined size;

disposing each said elastic body and each said metal foil in predetermined positions;

combining each said elastic body and each said metal foil with a said spacer to form a pressure release hole unit;

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fitting each said pressure release hole unit into a said plate-like member to produce electrode caps;

positioning an internal electrode body in a battery case; and

sealing the battery case with said electrode caps.
